

Release notes for ENDF/B Development n-089_Ac_226
evaluation



April 26, 2017

- fudge-4.0 Warnings:

1. Cross section does not match sum of linked reaction cross sections
crossSectionSum label 0: total (Error # 0): CS Sum.

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.50%

2. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 1 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'1 delayed'] + gamma [total fission] [nubar]): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

3. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 3 (total): / Form 'eval': / Component 0 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

4. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 3 (total): / Form 'eval': / Component 1 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

5. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 4 (n + Ac226): / Form 'eval': / Component 0 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

6. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 4 (n + Ac226): / Form 'eval': / Component 1 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

7. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 8 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'1 delayed'] + gamma [total fission]): / Form 'eval': / Component 0 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

8. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 8 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'1 delayed'] + gamma [total fission]): / Form 'eval': / Component 1 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

9. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 10 ($n + (Ac226_e1 \rightarrow Ac226 + \gamma)$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (6.705396e-10) is too small

10. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 11 ($n + (Ac226_e2 \rightarrow Ac226 + \gamma)$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (3.550633e-09) is too small

11. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 12 ($n + (Ac226_e3 \rightarrow Ac226 + \gamma)$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (3.705425e-09) is too small

12. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 13 ($n + (Ac226_e4 \rightarrow Ac226 + \gamma)$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (5.367896e-10) is too small

13. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 14 ($n + (Ac226_e5 \rightarrow Ac226 + \gamma)$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (2.190288e-09) is too small

14. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 15 ($n + (Ac226_e6 \rightarrow Ac226 + \gamma)$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (4.452323e-10) is too small

15. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 16 ($n + (Ac226_e7 \rightarrow Ac226 + \gamma)$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (4.246902e-09) is too small

16. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 17 ($n + (Ac226_c \rightarrow Ac226 + \gamma)$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

17. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 18 (Ac227 + gamma): / Form 'eval': / Component 0 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

18. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 18 (Ac227 + gamma): / Form 'eval': / Component 1 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

19. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 19 (n + Ac226 [angular distribution]): / Form 'eval': (Error # 1): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

20. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 20 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'1 delayed'] + gamma [total fission] [spectrum]): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

21. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 21 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'1 delayed'] + gamma [total fission] [spectrum]): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

22. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 22 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'1 delayed'] + gamma [total fission] [spectrum]): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

23. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 23 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'1 delayed'] + gamma [total fission] [spectrum]): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

- fudge-4.0 Errors:

1. Energy range of data set does not match cross section range

$$\text{reaction label 8: } n + (\text{Ac226_c} \rightarrow \text{Ac226} + \text{gamma}) / \text{Product: Ac226_c} / \text{Decay product: gamma_a} / \text{Multiplicity: (Error \# 0): Domain mismatch (a)}$$

WARNING: Domain doesn't match the cross section domain: (120000.0 -> 20000000.0) vs (110984.0 -> 20000000.0)
2. Energy range of data set does not match cross section range

$$\text{reaction label 8: } n + (\text{Ac226_c} \rightarrow \text{Ac226} + \text{gamma}) / \text{Product: Ac226_c} / \text{Distribution: / uncorrelated - angular - isotropic: (Error \# 0): Domain mismatch (a)}$$

WARNING: Domain doesn't match the cross section domain: (120000.0 -> 20000000.0) vs (110984.0 -> 20000000.0)
 WARNING: Domain doesn't match the cross section domain: (200000.0 -> 20000000.0) vs (110984.0 -> 20000000.0)
 WARNING: Domain doesn't match the cross section domain: (170000.0 -> 20000000.0) vs (110984.0 -> 20000000.0)
 WARNING: Domain doesn't match the cross section domain: (140000.0 -> 20000000.0) vs (110984.0 -> 20000000.0)
 ... plus 6 more instances of this message
3. Energy range of data set does not match cross section range

$$\text{reaction label 8: } n + (\text{Ac226_c} \rightarrow \text{Ac226} + \text{gamma}) / \text{Product: Ac226_c} / \text{Decay product: gamma_b} / \text{Multiplicity: (Error \# 0): Domain mismatch (a)}$$

WARNING: Domain doesn't match the cross section domain: (200000.0 -> 20000000.0) vs (110984.0 -> 20000000.0)
4. Energy range of data set does not match cross section range

$$\text{reaction label 8: } n + (\text{Ac226_c} \rightarrow \text{Ac226} + \text{gamma}) / \text{Product: Ac226_c} / \text{Decay product: gamma_c} / \text{Multiplicity: (Error \# 0): Domain mismatch (a)}$$

WARNING: Domain doesn't match the cross section domain: (170000.0 -> 20000000.0) vs (110984.0 -> 20000000.0)
5. Energy range of data set does not match cross section range

$$\text{reaction label 8: } n + (\text{Ac226_c} \rightarrow \text{Ac226} + \text{gamma}) / \text{Product: Ac226_c} / \text{Decay product: gamma_d} / \text{Multiplicity: (Error \# 0): Domain mismatch (a)}$$

WARNING: Domain doesn't match the cross section domain: (140000.0 -> 20000000.0) vs (110984.0 -> 20000000.0)
6. Energy range of data set does not match cross section range

$$\text{reaction label 8: } n + (\text{Ac226_c} \rightarrow \text{Ac226} + \text{gamma}) / \text{Product: Ac226_c} / \text{Decay product: gamma_e} / \text{Multiplicity: (Error \# 0): Domain mismatch (a)}$$

WARNING: Domain doesn't match the cross section domain: (120000.0 -> 20000000.0) vs (110984.0 -> 20000000.0)
7. Energy range of data set does not match cross section range

$$\text{reaction label 8: } n + (\text{Ac226_c} \rightarrow \text{Ac226} + \text{gamma}) / \text{Product: Ac226_c} / \text{Decay product: gamma_f} / \text{Multiplicity: (Error \# 0): Domain mismatch (a)}$$

WARNING: Domain doesn't match the cross section domain: (170000.0 -> 20000000.0) vs (110984.0 -> 20000000.0)
8. Energy range of data set does not match cross section range

$$\text{reaction label 8: } n + (\text{Ac226_c} \rightarrow \text{Ac226} + \text{gamma}) / \text{Product: Ac226_c} / \text{Decay product: gamma_g} / \text{Multiplicity: (Error \# 0): Domain mismatch (a)}$$

WARNING: Domain doesn't match the cross section domain: (140000.0 -> 20000000.0) vs (110984.0 -> 20000000.0)
9. Energy range of data set does not match cross section range

$$\text{reaction label 8: } n + (\text{Ac226_c} \rightarrow \text{Ac226} + \text{gamma}) / \text{Product: Ac226_c} / \text{Decay product: gamma_h} / \text{Multiplicity: (Error \# 0): Domain mismatch (a)}$$

- WARNING: Domain doesn't match the cross section domain: (200000.0 -> 20000000.0) vs (110984.0 -> 20000000.0)
10. Energy range of data set does not match cross section range
reaction label 8: n + (Ac226_c ->Ac226 + gamma) / Product: Ac226_c / Decay product: gamma_i / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (200000.0 -> 20000000.0) vs (110984.0 -> 20000000.0)
11. Energy range of data set does not match cross section range
reaction label 8: n + (Ac226_c ->Ac226 + gamma) / Product: Ac226_c / Decay product: gamma_j / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (170000.0 -> 20000000.0) vs (110984.0 -> 20000000.0)
12. Calculated and tabulated Q values disagree.
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma (Error # 0): Q mismatch
- WARNING: Calculated and tabulated Q-values disagree: -5799036.736236572 eV vs -5399320. eV!
13. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_a / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
14. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_a / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
15. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_b / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
16. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_b / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
17. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_c / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
18. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_c / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)

19. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_d / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
20. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_d / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
21. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_e / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
22. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_e / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
23. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_f / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
24. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_f / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
25. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_g / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
26. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_g / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
27. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_h / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)

28. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_h / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
29. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_i / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
30. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_i / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
31. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_j / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
32. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_j / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
33. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_k / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
34. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_k / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
35. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_l / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
36. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_l / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)

37. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_m / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
38. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_m / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
39. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_n / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
40. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_n / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
41. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_o / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
42. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_o / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
43. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_p / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
44. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_p / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
45. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_q / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)

46. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_q / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
47. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_r / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
48. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_r / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
49. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_s / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
50. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_s / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
51. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_t / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
52. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_t / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
53. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_u / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)
54. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_u / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)

55. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_v / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)

56. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_v / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)

57. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_w / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)

58. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_w / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)

59. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_x / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)

60. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_x / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)

61. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_y / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)

62. Energy range of data set does not match cross section range
reaction label 9: n[multiplicity:'2'] + Ac225 + gamma / Product: gamma_y / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5423420.0 -> 20000000.0)

63. Calculated and tabulated Q values disagree.
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -12466854.38671875 eV vs -1.20671e7 eV!

64. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_a / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

65. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_a / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

66. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_b / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

67. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_b / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

68. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_c / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

69. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_c / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

70. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_d / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

71. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_d / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

72. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_e / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

73. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_e / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

74. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_f / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

75. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_f / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

76. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_g / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

77. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_g / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

78. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_h / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

79. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_h / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

80. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_i / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

81. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_i / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

82. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_j / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

83. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_j / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

84. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_k / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

85. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_k / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

86. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_l / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

87. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_l / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

88. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_m / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

89. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_m / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

90. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_n / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

91. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_n / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

92. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_o / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

93. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_o / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

94. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_p / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

95. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_p / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

96. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_q / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

97. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_q / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

98. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_r / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

99. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_r / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

100. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_s / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)
101. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_s / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)
102. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_t / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)
103. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_t / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)
104. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_u / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)
105. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_u / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)
106. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_v / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)
107. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_v / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)
108. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_w / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)

109. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_w / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)
110. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_x / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)
111. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_x / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)
112. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_y / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)
113. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_y / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)
114. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_z / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)
115. Energy range of data set does not match cross section range
reaction label 10: n[multiplicity:'3'] + Ac224 + gamma / Product: gamma_z / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (12121000.0 -> 20000000.0)
116. Calculated and tabulated Q values disagree.
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma (Error # 0): Q mismatch
- WARNING: Calculated and tabulated Q-values disagree: -18129888.97012329 eV vs -1.77302e7 eV!
117. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_a / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)

118. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_a / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
119. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_b / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
120. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_b / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
121. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_c / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
122. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_c / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
123. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_d / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
124. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_d / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
125. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_e / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
126. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_e / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)

127. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_f / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
128. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_f / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
129. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_g / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
130. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_g / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
131. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_h / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
132. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_h / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
133. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_i / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
134. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_i / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
135. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_j / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)

136. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_j / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)

137. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_k / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)

138. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_k / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)

139. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_l / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)

140. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_l / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)

141. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_m / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)

142. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_m / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)

143. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_n / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)

144. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_n / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)

145. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_o / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
146. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_o / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
147. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_p / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
148. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_p / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
149. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_q / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
150. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_q / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
151. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_r / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
152. Energy range of data set does not match cross section range
reaction label 11: n[multiplicity:'4'] + Ac223 + gamma / Product: gamma_r / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17809300.0 -> 20000000.0)
153. Calculated and tabulated Q values disagree.
reaction label 13: Ac227 + gamma (Error # 0): Q mismatch
- WARNING: Calculated and tabulated Q-values disagree: 6130877.172393799 eV vs 6530590. eV!

154. Multiplicity does not match sum of linked product multiplicities!
 $multiplicitySum$ label 10: $n + (Ac226_c \rightarrow Ac226 + \gamma)$ total gamma multiplicity
(*Error # 0*): *summedMultiplicityMismatch*
- WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 43.42%
155. Multiplicity does not match sum of linked product multiplicities!
 $multiplicitySum$ label 11: $n[multiplicity:'2'] + Ac225 + \gamma$ total gamma multiplicity
(*Error # 0*): *summedMultiplicityMismatch*
- WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 95.65%
156. Multiplicity does not match sum of linked product multiplicities!
 $multiplicitySum$ label 12: $n[multiplicity:'3'] + Ac224 + \gamma$ total gamma multiplicity
(*Error # 0*): *summedMultiplicityMismatch*
- WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 100.00%
157. Multiplicity does not match sum of linked product multiplicities!
 $multiplicitySum$ label 13: $n[multiplicity:'4'] + Ac223 + \gamma$ total gamma multiplicity
(*Error # 0*): *summedMultiplicityMismatch*
- WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 90.00%
158. Calculated and tabulated Q values disagree.
 $fissionComponent$ label 0: $/reactionSuite/fissionComponents/fissionComponent[@label='0']$
(*Error # 0*): *Q mismatch*
- WARNING: Calculated and tabulated Q-values disagree: 211481130484.5175 eV vs 1.755848e8 eV!
159. Calculated and tabulated Q values disagree.
 $fissionComponent$ label 1: $/reactionSuite/fissionComponents/fissionComponent[@label='1']$
(*Error # 0*): *Q mismatch*
- WARNING: Calculated and tabulated Q-values disagree: 211481130484.5175 eV vs 1.755848e8 eV!
160. Calculated and tabulated Q values disagree.
 $fissionComponent$ label 2: $/reactionSuite/fissionComponents/fissionComponent[@label='2']$
(*Error # 0*): *Q mismatch*
- WARNING: Calculated and tabulated Q-values disagree: 211481130484.5175 eV vs 1.755848e8 eV!
161. Calculated and tabulated Q values disagree.
 $fissionComponent$ label 3: $/reactionSuite/fissionComponents/fissionComponent[@label='3']$
(*Error # 0*): *Q mismatch*
- WARNING: Calculated and tabulated Q-values disagree: 211481130484.5175 eV vs 1.755848e8 eV!
162. A covariance matrix was not positive semi-definite, so it has negative eigenvalues.
Section 19 (n + Ac226 [angular distribution]): / Form 'eval': / LegendreLValue L=1 vs 1 (*Error # 0*): *Bad evals*
- WARNING: 10 negative eigenvalues! Worst case = -7.175969e-05

- njoy2012 Warnings:

- Evaluation has no resonance parameters given
unresr...calculation of unresolved resonance cross sections (0): No RR

```
---message from unresr---mat 8928 has no resonance parameters
copy as is to nout
```

- In some evaluations, the partial fission reactions MT=19, 20, 21, and 38 are given in File 3, but no corresponding distributions are given. In these cases, it is assumed that MT=18 should be used for the fission neutron distributions.
heatr...prompt kerma (0): HEATR/hinit (3)

```
---message from hinit---mt19 has no spectrum
mt18 spectrum will be used.
```

- Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (1): HEATR/hinit (4)

```
---message from hinit---mf6, mt 16 does not give recoil za= 89225
one-particle recoil approx. used.
```

- Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (2): HEATR/hinit (4)

```
---message from hinit---mf6, mt 17 does not give recoil za= 89224
one-particle recoil approx. used.
```

- Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (3): HEATR/hinit (4)

```
---message from hinit---mf6, mt 37 does not give recoil za= 89223
one-particle recoil approx. used.
```

- Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (4): HEATR/hinit (4)

```
---message from hinit---mf6, mt 51 does not give recoil za= 89226
one-particle recoil approx. used.
```

- Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (5): HEATR/hinit (4)

```
---message from hinit---mf6, mt 52 does not give recoil za= 89226
one-particle recoil approx. used.
```

- Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (6): HEATR/hinit (4)

```
---message from hinit---mf6, mt 53 does not give recoil za= 89226
one-particle recoil approx. used.
```

- Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (7): HEATR/hinit (4)

```
---message from hinit---mf6, mt 54 does not give recoil za= 89226
one-particle recoil approx. used.
```

10. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (8): HEATR/hinit (4)

```
---message from hinit---mf6, mt 55 does not give recoil za= 89226
one-particle recoil approx. used.
```

11. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (9): HEATR/hinit (4)

```
---message from hinit---mf6, mt 56 does not give recoil za= 89226
one-particle recoil approx. used.
```

12. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (10): HEATR/hinit (4)

```
---message from hinit---mf6, mt 57 does not give recoil za= 89226
one-particle recoil approx. used.
```

13. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (11): HEATR/hinit (4)

```
---message from hinit---mf6, mt 91 does not give recoil za= 89226
one-particle recoil approx. used.
```

14. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (12): HEATR/hinit (4)

```
---message from hinit---mf6, mt102 does not give recoil za= 89227
photon momentum recoil used.
```

15. There is a problem with the fission energy release.
heatr...prompt kerma (13): HEATR/nheat (3)

```
---message from nheat---changed q from 1.755848E+08 to 1.679355E+08
for mt 18
```

16. Evaluation has no resonance parameters given
purr...probabalistic unresolved calculation (0): No RR

```
---message from purr---mat 8928 has no resonance parameters
copy as is to nout
```